

May 02, 2017

Dave Blye  
Environmental Standards, Inc.  
1140 Valley Forge Road  
PO Box 810  
Valley Forge, PA 19482

RE: Project: Hudson River Resuspension Moni  
Pace Project No.: 10385401

Dear Dave Blye:

Enclosed are the analytical results for sample(s) received by the laboratory on April 18, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy  
carol.davy@pacelabs.com  
1(612)607-6436  
Project Manager

Enclosures

cc: Meg Michell, Environmental Standards, Inc.



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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## CERTIFICATIONS

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

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### Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: UST-078

Alaska DW Certification #: MN00064

Arizona Certification #: AZ0014

Arkansas Certification #: 88-0680

California Certification #: MN00064

CNMI Saipan Certification #: MP0003

Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: 8TMS-L

Florida Certification #: E87605

Georgia Certification #: 959

Guam EPA Certification #: MN00064

Hawaii Certification #: MN00064

Idaho Certification #: MN00064

Illinois Certification #: 200011

Indiana Certification #: C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky DW Certification #: 90062

Kentucky WW Certification #: 90062

Louisiana DEQ Certification #: 03086

Louisiana DW Certification #: MN00064

Maine Certification #: MN00064

Maryland Certification #: 322

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: MN00064

Montana Certification #: CERT0092

Nebraska Certification #: NE-OS-18-06

Nevada Certification #: MN00064

New Hampshire Certification #: 2081

New Jersey Certification #: MN002

New York Certification #: 11647

North Carolina DW Certification #: 27700

North Carolina WW Certification #: 530

North Dakota Certification #: R-036

Ohio DW Certification #: 41244

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001

Oregon Secondary Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification #: MN00064

South Carolina Certification #: 74003001

Tennessee Certification #: TN02818

Texas Certification #: T104704192

Utah Certification #: MN00064

Virginia Certification #: 460163

Washington Certification #: C486

West Virginia DW Certification #: 9952 C

West Virginia WW Certification #: 382

Wisconsin Certification #: 999407970

Wyoming via EPA Region 8 Certification #: 8TMS-L

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10385401001	OWS-WAFO-T170417123557	Water	04/17/17 11:36	04/18/17 09:45

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## SAMPLE ANALYTE COUNT

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10385401001	OWS-WAFO-T170417123557	SM 2540D	NAS	1	PASI-M

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## PROJECT NARRATIVE

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

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**Method:** SM 2540D

**Description:** 2540D TSS, Low Level

**Client:** GE\_Anchor QEA, LLC

**Date:** May 02, 2017

### General Information:

1 sample was analyzed for SM 2540D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

**Sample:** OWS-WAFO-  
T170417123557 **Lab ID:** 10385401001 Collected: 04/17/17 11:36 Received: 04/18/17 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>2540D TSS, Low Level</b>									
Analytical Method: SM 2540D									
Total Suspended Solids	<b>8.5</b>	mg/L	1.0	0.50	1		04/24/17 08:26		

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## QUALITY CONTROL DATA

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

QC Batch: 470026

Analysis Method: SM 2540D

QC Batch Method: SM 2540D

Analysis Description: 2540D TSS, Low Level

Associated Lab Samples: 10385401001

METHOD BLANK: 2566805

Matrix: Water

Associated Lab Samples: 10385401001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Suspended Solids	mg/L	<1.0	1.0	0.50	04/24/17 08:26	

LABORATORY CONTROL SAMPLE & LCSD: 2566806

2566807

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	100	91.4	93.3	91	93	80-120	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Date: 05/02/2017 04:09 PM

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## QUALIFIERS

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hudson River Resuspension Moni

Pace Project No.: 10385401

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10385401001	OWS-WAFO-T170417123557	SM 2540D	470026		

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300 West Grand Avenue, Morrisville, NY 12045 Tel: 518-939-8939

Client: General Electric Company

# ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: COC170417123557

Sample Custodian: CCY

Lab: PACE

Project: Hudson River Remedial Action Monitoring Program - Resuspension Monitoring

COC Sample Number	Field Sample ID	QA/QC	Matrix **	Date Collected	Time Collected	Media*	# Containers	TEST REQUESTED	METHOD	MS	MSD	LD	Turn Around Time (hrs)	Preservative					
001	OWS-WAFO-T170417123557	ENV	W	04/17/2017	11:36	W	4												
Total Suspended Solids														SM 2540D	N	N	Y	504	4degC
CS PCBs														NE294_02	N	N	N	504	4degC

\*TSS only shipped to PACE-LAN 4/17/17


Relinquished by:		Received by:		Relinquished by:		Received by:	
Signature	Print Name	Signature	Print Name	Signature	Print Name	Signature	Print Name
<i>[Signature]</i>	<i>[Print Name]</i>	<i>[Signature]</i>	<i>[Print Name]</i>	<i>[Signature]</i>	<i>[Print Name]</i>	<i>[Signature]</i>	<i>[Print Name]</i>
Company	Date/Time	Company	Date/Time	Company	Date/Time	Company	Date/Time
PACE	4/17/17 12:43	PACE	4/17/17 14:38	PACE	4/17/17 15:29	PACE	4/18/17 9:45


Date Printed: 4/17/2017

\* S = SEDIMENT, W = WATER, PW = PORE WATER

\*\* W = Total/Whole, D = Dissolved, R = Residue, S = Sediment

Page 1 of 1

	Document Name:	Document Revised: 19Dec2016
	Sample Condition Upon Receipt Form	Page 1 of 2
	Document No.: F-MN-L-213-rev.20	Issuing Authority: Pace Minnesota Quality Office

<b>Sample Condition Upon Receipt</b> Courier: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> SpeedDee <input type="checkbox"/> Other:	<b>Client Name:</b> <u>Anchor Q EA</u>	<b>Project #:</b> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>WO# : 10385401</b>    <b>10385401</b> </div>
	<b>Tracking Number:</b> <u>7445 4771 8557</u>	

<b>Custody Seal on Cooler/Box Present?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Packing Material:</b> <input type="checkbox"/> Bubble Wrap <input type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input checked="" type="checkbox"/> Other: <u>PB</u> <b>Thermometer Used:</b> <input checked="" type="checkbox"/> 151401163 <input type="checkbox"/> 151401164 <b>Cooler Temp Read (°C):</b> <u>5.1</u> <b>Cooler Temp Corrected (°C):</b> <u>5.3</u> <b>Temp should be above freezing to 6°C</b> <b>Correction Factor:</b> <u>10.2</u> <b>USDA Regulated Soil</b> ( <input checked="" type="checkbox"/> N/A, water sample) <b>Did samples originate in a quarantine zone within the United States:</b> AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Biological Tissue Frozen?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <b>Date and Initials of Person Examining Contents:</b> <u>CSG 4/18/17</u>	<b>Optional:</b> Proj. Due Date: Proj. Name:
<b>Seals Intact?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Temp Blank?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Type of Ice:</b> <input checked="" type="checkbox"/> Wet <input type="checkbox"/> Blue <input type="checkbox"/> None <input type="checkbox"/> Samples on ice, cooling process has begun	

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

	COMMENTS:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and/or Signature on COC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72 hr)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered Volume Received for Dissolved Tests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No -Includes Date/Time/ID/Analysis Matrix: <u>WT</u>	12. <u>COC says 4 containers, only 2 received</u>
All containers needing acid/base preservation have been checked? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH Positive for Res. Chlorine? Y N
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , <2pH, NaOH >9 Sulfide, NaOH >12 Cyanide) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin. <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	

<b>CLIENT NOTIFICATION/RESOLUTION</b> Person Contacted: _____ Date/Time: _____ Comments/Resolution: <u>PCB containers were kept at Schenectady</u>	<b>Field Data Required?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
--	--

**Project Manager Review:** [Signature] **Date:** 4/19/17  
 Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).



# Analytical Data Package

**Prepared by:**

**Pace Analytical Services**

**Pace Project No.: 10385401**

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FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

OWS-WAFO-  
T170417123557

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract: Hudson River Resuspension  
Lab Sample ID: 10385401001 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Suspended Solids	8.5		mg/L	1	04/24/2017 08:26

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract : Hudson River Resuspension Moni

Method Blank Matrix: Water Instrument ID: 10WET4

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2566805	C
Total Suspended Solids									<1.0	U

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

2566807LCSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract: Hudson River Resuspension

Matrix: Water Concentration Units: mg/L

Percent Moisture:                      Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Suspended Solids	10	91.4	93.3	2

FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

2566806LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract: Hudson River Resuspension

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Suspended Solids	mg/L	100	91.4	91	80	120

FORM VII INORGANIC-2  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

2566807LCSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract: Hudson River Resuspension

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Suspended Solids	mg/L	100	93.3	93	80	120

FORM IX INORGANIC-1  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract: Hudson River Resuspension Moni

Preparation Method: SM 2540D Instrument ID: 10WET4

Concentration Units: mg/L

Analyte	PQL	MDL	MDL Date
Total Suspended Solids	2.0	1.0	04/01/2015

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract: Hudson River Resuspension Moni

Preparation Method: SM 2540D Batch: WET 53084

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2566805	2566805	04/24/2017	1000	500
2566806	2566806	04/24/2017	1000	500
2566807	2566807	04/24/2017	1000	500
10385401001	OWS-WAFO-	04/24/2017	1000	500

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10385401 Contract: Hudson River Resuspension Moni

Instrument ID: 10WET4

Analysis Method: SM 2540D

Start Date: 04/24/2017 08:26

End Date: 04/24/2017 08:26

Sample Name	Lab Sample ID	D/F	Date	Time	tss w
2566805BLANK	2566805	1	04/24/2017	08:26	X
2566806LCS	2566806	1	04/24/2017	08:26	X
2566807LCSD	2566807	1	04/24/2017	08:26	X
OWS-WAFO-	10385401001	1	04/24/2017	08:26	X

Batch Information: WET 53084 TSS LL

Analysis Method	SM 2540D
Oven ID	10WET17
Oven Temp Out1   Corr   Date/Time   Init	103.0   103.0   04/24/2017 09:29   NAS
Oven Temp Out2   Corr   Date/Time   Init	103.0   103.0   05/02/2017 13:08   NAS
Reviewed By Date	05/02/2017 15:52

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	ID	TSS Final (mg/L)	TSS Posted (mg/L)	Run Date/Time	Initial Volume (mL)	TSS Filters ( )	Filter Wt 1 (g)	Filter Use 1	Oven Wt 1 (g)	Oven Use 1	Oven Wt 2 (g)
2540D WLL	BLANK	2566805	Y	FZBWD	0.0000	0.0000	04/24/2017 08:26	1000	116212 ( )	0.1168	M	0.1168	N	0.1168
2540D WLL	LCS	2566806	Y	FZC58	91.400	182.80	04/24/2017 08:26	1000	116212 ( )	0.1170	M	0.2088	N	0.2084
2540D WLL	LCSD	2566807	Y	FZC59	93.300	186.60	04/24/2017 08:26	1000	116212 ( )	0.1158	M	0.2092	N	0.2091
2540D WLL	PS	10385401001	Y	FZC5A	8.5000	17.000	04/24/2017 08:26	1000	116212 ( )	0.1263	M	0.1349	N	0.1348

Template Version: F-MN-I-326-Rev.03 (24Jan2017)

Analyzed By	NAS	Instrument	10WET4	Acceptance Range:	103-105 C
Thermometer ID	4310	Oven Temp Correction Factor	0	Oven Temp In1   Corr   Date/Time   Init	104.0   104.0   04/24/2017 08:26   NAS
Desic. In 1 ID   Date/Time   Init	14   04/24/2017 09:29   NAS	Desic. Out 1 Date/Time   Init	05/01/2017 09:59   KEO	Oven Temp In2   Corr   Date/Time   Init	104.0   104.0   05/01/2017 10:03   KEO
Desic. In 2 ID   Date/Time   Init	2   05/02/2017 13:08   NAS	Desic. Out 2 Date/Time   Init	05/02/2017 15:05   KEO	Reviewed By	DCL
Batch Notes					

QC Rule	Sample Type	Lab Sample ID	Oven Use 2	Oven %Diff 1&2	Oven Wt Diff 1&2	Sample Notes	TS/TDS-SPK (mL)
2540D WLL	BLANK	2566805	Y	NaN	0.0000		
2540D WLL	LCS	2566806	Y	0.43668	0.0004		117321 (50)
2540D WLL	LCSD	2566807	Y	0.10712	0.0001		117321 (50)
2540D WLL	PS	10385401001	Y	1.1696	0.0001		

Standard Notes:

117321: TS/TSS/TDS Handmade Standard, Used